

## CLAIMS

I claim:

1. A receiver diversity process comprising:

a plurality of repeaters receiving wirelessly transmitted packets from a mobile

station;

one of the plurality of repeaters forwarding packets of the wirelessly transmitted packets to a switch if the one repeater is currently assigned to forward packets from the mobile station based on an indicator assigned prior to the wirelessly transmitted packets being sent.

2. The process defined in Claim 1 further comprising receiving the indicator from the switch.

3. The process defined in Claim 1 wherein the indicator is a token.

4. The process defined in Claim 1 further comprising switching the indicator to another of the plurality of repeaters other than the one repeater based on movement of the mobile station with respect to the one repeater and the another repeater.

5. The process defined in Claim 4 further comprising determining whether to switch the indicator to a different repeater.

6. The process defined in Claim 5 wherein determining whether to switch the indicator occurs on a packet-by-packet basis.
7. The process defined in Claim 5 wherein determining whether to switch the indicator occurs at regular intervals based on a predetermined number of packets.
8. The process defined in Claim 1 further comprising the one repeater sending an acknowledgement to the mobile station.
9. A method comprising:
  - a repeater receiving one or more tokens from a switch, wherein each of the one or more tokens corresponds to a mobile station supported by the repeater;
  - the repeater storing the one or more tokens;
  - the repeater receiving a wirelessly transmitted packet from a mobile station;
  - the repeater comparing a MAC address in the packet to the MAC addresses indicated by one or more tokens;
  - the repeater sending an acknowledgement packet to the mobile station if the MAC address of the mobile station, as indicated in the packet, matches a MAC address of one mobile station for which the repeater has a token.

10. The method defined in Claim 9 wherein the token is sent as part of an add token command to the repeater from the switch.

11. The method defined in Claim 10 wherein the token packet comprises an Ethernet packet.

12. The method defined in Claim 11 wherein the wirelessly transmitted packet is an 802.11 packet.

13. The method defined in Claim 9 wherein the wirelessly transmitted packet is an 802.11 packet.

14. An apparatus comprising:  
 means for receiving one or more tokens from a switch, wherein each of the one or more tokens corresponds to a mobile station supported by a repeater;  
 means for storing the one or more tokens;  
 means for receiving a wirelessly transmitted packet from a mobile station;  
 means for comparing a MAC address in the packet to the MAC addresses indicated by one or more tokens;

means for sending an acknowledgement packet to the mobile station if the MAC address of the mobile station, as indicated in the packet, matches a MAC address of one mobile station for which the repeater has a token.

15. The apparatus defined in Claim 14 wherein the token is sent as part of a token packet to the repeater from the switch.

16. The apparatus defined in Claim 15 wherein the token packet comprises an Ethernet packet.

17. the apparatus defined in Claim 16 wherein the wirelessly transmitted packet is an 802.11 packet.

18. The apparatus defined in Claim 14 wherein the wirelessly transmitted packet is an 802.11 packet.

19. A system comprising:  
one or more mobile stations to transmit packets wirelessly;  
a switch to provide tokens; and

a repeater coupled to the switch and having a memory to store one or more tokens, each of the one or more tokens corresponding to a mobile station to be supported by the repeater;

and wherein the repeater receives a wirelessly transmitted packet from one mobile station and includes

a comparator to compare a MAC address in the wirelessly transmitted packet to one or more MAC addresses stored in the memory, and

a transmitter to transmit an acknowledgement packet to the one mobile station if the MAC address of the one mobile station as indicated in the wirelessly transmitted packet matches a MAC address of one token stored by the repeater.

20. The system defined in Claim 19 wherein the wirelessly transmitted packet is an 802.11 packet.